

## **REMARKS/ARGUMENTS**

The Applicant respectfully requests reconsideration of the present application in view of the above changes to the claims and the following remarks, which are responsive to the Office Action mailed April 4, 2008.

### **I. Status of Claims**

In the Office Action, Claims 1-7, 11, 12 and 16-27 were noted as pending in the application and were rejected. As a result of this response, new dependent Claim 28 has been added, Claims 3, 11 and 23 have been canceled, and Claims 1, 12, 16 and 19-22 have been amended in order further clarify the claimed invention. Claims 1, 2, 4-7, 12, 16-22 and 24-28 are now pending.

### **II. Rejection of Claims**

#### **a. 35 U.S.C. 102 – *Sakai***

In the Office Action, Claims 1, 3-4, 11, 16, 22, 23 and 26 were rejected under 35 U.S.C. § 102(a/e) as anticipated by U.S. Patent No. 6,665,810 to Sakai (hereinafter “*Sakai*”). (Office Action, page 3). For at least the reasons discussed below, Applicant respectfully asserts that Claims 1, 3-4, 11, 16, 22, 23 and 26 are not anticipated by *Sakai* and respectfully requests that the rejection be withdrawn.

#### **i. Independent Claims 1, 16 and 22**

Applicant respectfully asserts that *Sakai* does not teach or suggest each of the recitations of independent Claim 1, 16 or 22. In particular, Applicant respectfully asserts that *Sakai* does not teach or suggest “a data throttle ... [that] limits the first data transfer rate [at which a first host is capable of transmitting multiplexed data] to a throttle value that is less than or equal to the lesser one of the first data transfer rate and the second data transfer rate [at which a second host is capable of receiving multiplexed data], ... wherein the throttle value transfer rate is obtained

during a communication start-up process[,]” as recited in Applicant’s independent Claim 1. Similarly, with regard to independent Claim 16, Applicant respectfully asserts that *Sakai* does not teach or suggest “setting, during a communication start-up process, a throttle value that is less than or equal to the lesser of the data transfer rate of the first host and the data transfer rate of the second host.” Finally, with regard to independent Claim 22, Applicant respectfully asserts that *Sakai* does not teach or suggest “a processor configured to set a throttle value for transmission of data from the first host to the second host to a value that is less than or equal to the lesser of the data transfer rate of the first and second host, respectively, wherein the throttle value is set during a communication start-up process.”

First, in the Office Action, the Examiner states, with reference to Figure 6 of *Sakai*, that “Sakai clearly discloses the PC is capable of a performance of 400 Mbps, the DVC is capable of 100 Mbps, and the VCR is capable of 400 Mbps. Communication between any combination of the three is adjusted to the maximum available transfer rate between the three.” (Office Action, page 2). Applicant respectfully disagrees. First, Applicant respectfully asserts that Figure 6 of *Sakai* does not, as suggested by the Examiner, illustrate that the PC is *capable* of 400 Mbps, the DVC is *capable* of 100 Mbps, or that the VCR is *capable* of 400 Mbps. Second, Applicant respectfully asserts that *Sakai* does not teach or suggest adjusting the communication between any combination of the three to the maximum available data transfer rate.

With regard to the former, as explained in Column 3 line 40 through Column 4 line 62 of *Sakai*, and as referenced in Applicant’s previous response of November 26, 2007, Figure 6 illustrates the *actual* data transfer rate of the internal circuit of the DVC when data is addressed either to the DVC itself for image processing (i.e., 100 Mbps) or to either the VCR or the PC (i.e., 400 Mbps) *when there is no external power source*. This is in contrast to Figure 7, which illustrates the *actual* data transfer rate of the internal circuit of the DVC when data is addressed either to the DVC itself for image processing (i.e., 400 Mbps) or to either the VCR or the PC (i.e., 400 Mbps) *when there is an external power source*. Figure 6, thus, does not illustrate the data transfer rate at which each of the DVC, VCR and PC, respectively, is capable of communicating, as suggested by the Examiner.

With regard to the latter, *Sakai* does not teach or suggest adjusting to the maximum available data transfer rate. In fact, in at least one embodiment of *Sakai*, the data transfer rate of the DVC is reduced by 300 Mbps because a battery, instead of an external power source, is being used not because of the maximum available data transfer rate. In particular, as noted in the November 26, 2007 response,

If the repeat transfer function is executed when the DVC 2 is powered by the battery B, the frequency dividing circuit 20 sets a first frequency dividing ratio in response to the control signal SD. The first frequency dividing ratio corresponds to the transfer rate of 400 megabits per second. Accordingly, the DVC 2 executes the communication at the transfer rate of 400 megabits per second. When the DVC 2 is powered by the battery B and the data transfer for the self-device is performed, the frequency dividing circuit 20 sets a second frequency dividing ratio in response to the control circuit SD. The second frequency dividing ratio corresponds to the transfer rate of 100 megabits per second. Accordingly, the DVC 2 executes the communication at the transfer rate of 100 megabits per second.

On the contrary, when the DVC 2 is powered by an external power supply, the frequency dividing circuit 20 sets the first frequency dividing ratio in response to the control signal SD. Accordingly, the DVC 2 executes the repeat transfer and the image data transfer at the transfer rate of 400 megabits per second.

(*Sakai* at 4:43-62).

In other words, when the “data transfer for the self-device is performed,” (i.e., when the data is addressed to the DVC), and the DVC is powered by battery, the data transfer rate is 100 Mbps. In contrast, when the DVC “executes the ... image data transfer” (i.e., when the data is, again, addressed to the DVC), but the DVC is powered by an external power source, the data transfer rate is 400 Mbps. In at least the former embodiment, the communication was arguably not adjusted to the maximum available data transfer rate (i.e., 400 Mbps), as evidenced by the latter embodiment, as well as the embodiments in which the repeat transfer function is executed and the DVC is powered by battery or external power source, in each of which case the DVC likewise transfers data at 400 Mbps.

As described above and as noted in the November 26, 2007 response, *Sakai* discloses selecting the data transfer rate based on two factors: (1) whether the devices involved are

powered by a battery or an external power supply; and (2) the final destination of the data (i.e., the DVC (self-device) or the VCR or PC (repeat transfer)). Neither of these factors corresponds to the maximum available data transfer rate. As a result, *Sakai* does not teach or suggest setting a throttle value that is less than or equal to the lesser of the data transfer rate of a first host and the data transfer rate of a second host.

Second, *Sakai* does not teach or suggest obtaining or setting a throttle value transfer rate during a communication start-up process, as recited by Applicant's independent Claims 1, 16 and 22. For this, the Examiner relies on the following excerpt from *Sakai*:

The internal circuit 12 sends transfer data via the interface circuit 11 and the input/output port 6 to the PC 3 indicating that the communication will be carried out at the transfer rate of 100 megabits per second.

Then, the internal circuit 12 provides the decision signals SA, SB and SC to the clock control circuit 13. The power supply decision circuit 16 determines that the DVC 2 is powered by the battery B and the self-device decision circuit 17 determines that the image data transfer will be performed by the self-device (DVC 2). Based on the resulting control signals SA, SB and SC, the frequency dividing circuit 20 set the clock signal CLK using the second frequency dividing ratio.

The image data stored in the buffer 15 is output from the input/output port 6 via the interface circuit 11 in synchronism with the clock signal CLK. That is, the image data is sent from the DVC 2 to the PC 3 at the transfer rate of 100 megabits per second. The PC 3 receives the image data and displays an image on a display (not shown).

(Office Action, page 4, referencing *Sakai*, Col. 5, lines 43-61).

However, the above excerpt of *Sakai* does not teach or suggest obtaining a throttle value transfer rate that is less than or equal to the lesser one of a first and a second data transfer rate, during a communication start-up process, wherein the rate at which the first host transmits data to the second host is limited to the throttle value obtained. According to the above excerpt from *Sakai*, the DVC *transmits* transfer data to the PC indicating the transfer rate at which the DVC will be transmitting the image data to the PC. It does not teach or suggest, the DVC *receiving* a throttle value that limits the rate at which the DVC can transmit data to the PC. In particular, this excerpt (as well as the remaining disclosure) of *Sakai* does not teach or suggest the DVC, or any

other entity, receiving, setting or obtaining a throttle value that is less than or equal to the lesser of the data rate at which the DVC can transmit data and the data rate at which the PC (or VCR) can receive data, wherein the DVC is limited to the throttle value when transmitting data to the PC (or VCR). *Sakai* further, therefore, does not teach or suggest obtaining or setting such a throttle value transfer rate during a communication start-up process.

As a result, *Sakai* does not teach or suggest (1) “a data throttle ... [that] limits the first data transfer rate [at which a first host is capable of transmitting multiplexed data] to a throttle value that is less than or equal to the lesser one of the first data transfer rate and the second data transfer rate [at which a second host is capable of receiving multiplexed data], ... wherein the throttle value transfer rate is obtained during a communication start-up process[,]” as recited in Applicant’s independent Claim 1; (2) “setting, during a communication start-up process, a throttle value that is less than or equal to the lesser of the data transfer rate of the first host and the data transfer rate of the second host[,]” as recited by Applicant’s independent Claim 16; or (3) “ a processor configured to set a throttle value for transmission of data from the first host to the second host to a value that is less than or equal to the lesser of the data transfer rate of the first and second host, respectively, wherein the throttle value is set during a communication start-up process[,]” as recited by Applicant’s independent Claim 22.

Based on the foregoing, Applicant respectfully asserts that *Sakai* does not anticipate independent Claim 1, 16 or 22 and respectfully requests that the rejection of these claims be withdrawn.

## **ii. Dependent Claims 3-4, 23, 26 and 28**

Claims 3-4 and 11; and 23, 26 and 28 depend, respectively, from independent Claims 1 and 22 and include all of the recitations of the base claim and any intervening claims plus their additional recitations that further distinguish the art applied in the rejection. Thus, for at least the reasons set forth above with respect to independent Claims 1 and 22, it is respectfully submitted that dependent Claims 3-4, 11, 23, 26 and 28 are further patentable over the references cited as such dependent claims now depend from an allowable base claim.

**b. 35 U.S.C. 103 – *Sakai***

In the Office Action, Claim 12 was rejected under 35 U.S.C. § 103(a) as obvious in light of *Sakai*. (*Id.* at page 6). Claim 12 depends from independent Claim 1 and includes all of the recitations of the base claim and any intervening claims plus its additional recitations that further distinguish the art applied in the rejection. Thus, for at least the reasons set forth above with respect to independent Claim 1, it is respectfully submitted that dependent Claim 12 is further patentable over the references cited as such dependent claim now depends from an allowable base claim.

**c. 35 U.S.C. 103 – *Sakai* in view of *Lin***

In the Office Action, Claims 2, 19, 24 and 25 were rejected under 35 U.S.C. § 103(a) as obvious in light of *Sakai* in view of U.S. Patent No. 6,405,256 to Lin et al. (hereinafter “*Lin*”). (*Id.* at page 5). For at least the reasons discussed below, Applicant respectfully asserts that Claims 2, 19, 24 and 25 are not obvious in light of *Sakai* in view of *Lin*, and respectfully requests that the rejection be withdrawn.

**i. Independent Claim 19**

Applicant respectfully asserts that neither *Sakai* nor *Lin* teaches or suggests each of the recitations of independent Claim 19. In particular, neither reference teaches or suggests “receiving, during a communication start-up process, a throttle value that is less than or equal to the lesser of a data transfer rate of a source device, a data transfer rate of a destination device, and a data transfer rate of respective one or more intervening packet processing platforms located between the source and destination devices,” as recited in Applicant’s independent Claim 19.

As discussed above with regard to independent Claims 1, 16 and 22, *Sakai* does not teach or suggest a data throttle value that is less than or equal to the lesser of the data transfer rate associated with a first host (e.g., a source device) and a second host (e.g., a destination device), or receiving, setting or obtaining the data throttle value during a communication start-up process.

*Lin* further does not teach or suggest these recitations of independent Claim 19. In fact, the Office Action cites *Lin* for different purposes. In particular, the Office Action cites *Lin* as disclosing a “network having a third data transfer rate and limiting the throttle value based on the third data transfer rate.” (Office Action, page 5).

Since neither *Sakai* nor *Lin*, individually, teaches or suggests a throttle value that is less than or equal to the lesser of a data transfer rate associated with a source device and a data transfer rate associated with a destination device, or receiving the throttle value during a communication start-up process, the combination of *Sakai* and *Lin* likewise fails to teach or suggest these recitations of independent Claim 19.

In addition, Applicant respectfully asserts that *Lin* does not teach or suggest receiving, during a communication start-up process, a throttle value that is based on “a data transfer rate of respective one or more intervening packet processing platforms,” as also recited by independent Claim 19. In particular, *Lin* discloses a “data streaming transmission method and system ... having a network server connected to client device through a communication network with one or more caching servers.” (*Lin*, Abstract). According to *Lin*,

After the initialization phase has completed ... the data streaming commences at a first data rate from caching server level  $M$  ( $CS_M$ ) ... to the downstream caching server level  $M+1$  ( $CS_{M+1}$ ) ... Periodically ...  $CS_M$  checks for network congestion in the connection between  $CS_M$  and  $CS_{M+1}$ . This may be accomplished, for example, by the downstream  $CS_{M+1}$  or client device sending a packet loss rate to  $CS_M$ , which then compares the received packet loss rate to a predetermined packet loss rate corresponding to congestion in the network (hereafter known as the “congestion packet loss rate”). ... If the received packet loss rate by  $CS_M$  is greater than the congestion packet loss rate, there is network congestion in that connection of the network between  $CS_M$  and  $CS_{M+1}$ ; otherwise, there is no network congestion therebetween.

In the situation where network congestion does not exist, data segments are continuously streamed through the caching servers to the client device until the data file has been depleted ... When a connection in the path between the network server and client device is experiencing network congestion, for example, between  $CS_M$  and  $CS_{M+1}$ , the invention provides two measures to reduce the problems associated with the network congestion. One, the first data rate from  $CS_M$  to the downstream  $CS_{M+1}$  is decreased to a second data rate. Two, the expandable buffer in  $CS_M$  is increased.

(*Id.* at Col. 8, lines 28-56).

As described above, according to *Lin*, *after communication between a client device and a network server has commenced*, a caching server located between the client device and the network server will periodically check for congestion between itself and the immediately following caching server. If congestion is detected at that moment, the caching server may decrease the data rate used to transmit to the following server. *Lin* does not teach or suggest limiting the data transfer rate at which the *source device* can transmit to a destination device to less than or equal to a throttle value that is (1) received *during a communication start-up process* and, therefore, *prior to commencing transmission*, and (2) based on the data transfer rates of respective one or more intervening packet processing platforms between the source and destination devices. In contrast, *Lin* discloses modifying the data transfer rate of a caching server (not a source device) after transmission from the source device to the destination device has already commenced. Accordingly, *Lin* does not teach or suggest receiving, during a communication start-up process, a throttle value that is based on “a data transfer rate of respective one or more intervening packet processing platforms,” as recited by independent Claim 19.

Based on the foregoing, Applicant respectfully asserts that independent Claim 19 is patentable over *Sakai* in view of *Lin* and respectfully requests that the rejection of independent Claim 19 under 35 U.S.C § 103(a) be withdrawn.

## **ii. Dependent Claims 2, 24 and 25**

Dependent Claims 2; and 24-25 depend, respectively, from independent Claims 1 and 22 and include all of the recitations of the base claim and any intervening claims plus their additional recitations that further distinguish the art applied in the rejection. Thus, for at least the reasons set forth above with respect to independent Claims 1 and 22, it is respectfully submitted that dependent Claims 2, 24 and 25 are further patentable over the references cited as such dependent claims now depend from an allowable base claim.



**d. 35 U.S.C. 103 – *Sakai* in view of *Bach***

In the Office Action, Claims 5, 7, 17, 18 and 27 were rejected under 35 U.S.C. § 103(a) as obvious in light of *Sakai* in view of U.S. Patent No. 5,619,650 to Bach (hereinafter “*Bach*”). (*Id.* at page 7). Dependent Claims 5-7; 17-18; and 27 depend, respectively, from independent Claims 1, 16 and 22 and include all of the recitations of their base claim and any intervening claims plus their additional recitations that further distinguish the art applied in the rejection. Thus, for at least the reasons set forth above with respect to independent Claims 1, 16 and 22, it is respectfully submitted that dependent Claims 5-7, 17, 18 and 27 are further patentable over the references cited as such dependent claims now depend from allowable base claims.

**e. 35 U.S.C. 103 – *Sakai* in view of *Lin* and *Bach***

In the Office Action, Claims 20 and 21 were rejected under 35 U.S.C. § 103(a) as obvious in light of *Sakai* in view of *Lin* and further in view of *Bach*. (Office Action, page 8). Claims 20 and 21 depend from independent Claim 19 and include all of the recitations of the base claim and any intervening claims plus their additional recitations that further distinguish the art applied in the rejection. Thus, for at least the reasons set forth above with respect to independent Claim 19, it is respectfully submitted that dependent Claims 20 and 21 are further patentable over the references cited as such dependent claims now depends from an allowable base claim.

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### **III. Conclusion**

In light of the remarks above, Applicant respectfully submits that the application is in condition for allowance and respectfully requests that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicant's undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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